ABSTRACT OF THE DISCLOSURE

An image processing apparatus has interpolation calculation means which outputs, based on an input image signal P7, a binary signal P8=0 or 1 by calculating a formula, P8=S[i](xl,yl) EXOR (DF(xl,yl) AND IP(xl,yl)), using a screen pattern S[i](xl,yl), a difference pattern DF(xla,yla) based on screen patterns S[i] and S[i+1], and an interpolation pattern IP(xla,yla).